

## ABSTRACT

A medical diagnosis and monitoring equipment has wireless electrodes, which are attached to the surface of the skin of the patient. The electrodes comprise a digital transmitting and receiving unit with antenna and microsensors. The electrodes can be used, among other things, for detecting EEG- and EKG-signals, as well as for monitoring body/breathing movements, the temperature, perspiration, etc. A preferred exemplified embodiment comprises an electrode comprising all functions in a semiconductor chip which, as an integrated circuit, is equipped with the respective sensor, sensor control, frequency generation, transmitting and receiving units, as well as with a transmission control unit. The antenna is arranged in this connection in the flexible electrode covering or directly in the chip.